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## **Claims**

1. An agitation apparatus for a cleaning appliance comprising generating means for generating alternating pressure waves, a first fluid flow path with an inlet/outlet port and a second fluid flow path with an inlet/outlet port, the area adjacent the inlet/outlet ports forming an agitation region, wherein the generating means is arranged to generate a first alternating pressure wave along the first fluid flow path and a second alternating pressure wave along the second fluid flow path, the first and second pressure waves being substantially in anti-phase with one another.

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- 2. An agitation apparatus according to claim 1 wherein each flow path comprises a cavity.
- 3. An agitation apparatus according to claim 2 wherein the cavity is a resonating cavity.
  - 4. An agitation apparatus according to claim 2 or 3 wherein the cavity in each flow path is of the same volume.
- 20 5. An agitation apparatus according to any one of the preceding claims wherein the cavity is directly adjacent to the generating means.
  - 6. An agitation apparatus according to any one of claims 2 to 5 wherein each of the flow paths consists of a cavity with a port extending directly from it.

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7. An agitation apparatus according to any one of claims 1 to 4 wherein the cavity is located away from the generating means and is joined to the generating means by a duct.



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connecting to a source of suction and the ports of the agitation apparatus are spaced apart along the housing.

- 24. A cleaning head according to claim 22 or 23 wherein the ports are directed downwardly towards the sole plate.
  - 25. A cleaning head according to any one of claims 22 to 24 wherein the ports are inclined with respect to the sole plate of the cleaning head.
- 10 26. A cleaning head according to any one of claims 22 to 25, comprising a plurality of the agitation apparatus.
  - 27. A cleaning head according to claim 26 wherein the agitation apparatus are spaced along the longitudinal axis of the cleaning head.
  - 28. A cleaning head according to any one of claims 22 to 27 in the form of a tool for fitting to a wand.
- 29. A vacuum cleaner comprising a main body and a cleaning head, wherein part of the agitation apparatus according to any one of claims 1 to 21 is housed in or on the main body of the vacuum cleaner and ducting connects the part of the agitation apparatus in or on the main body to that part of the agitation apparatus on the cleaning head.
- 25 30. An agitation apparatus as claimed in any one of claims 1 to 21 for use with a vacuum cleaner having a cleaning head, wherein the inlet/outlet ports join the flow paths to the space within the cleaning head.

31. An agitation apparatus, a cleaning head or a vacuum cleaner substantially as described herein with reference to the accompanying drawings.